

## Claims

Claim 1-61 (cancelled).

Claim 62 (previously presented): A process for purifying reaction products comprising:  
providing a reaction product mixture comprising HF, C<sub>3</sub>Cl<sub>3</sub>F<sub>5</sub>, and C<sub>3</sub>Cl<sub>2</sub>F<sub>6</sub>;  
phase separating the reaction product mixture into a top liquid phase comprising  
HF and a bottom liquid phase comprising the C<sub>3</sub>Cl<sub>3</sub>F<sub>5</sub>, and C<sub>3</sub>Cl<sub>2</sub>F<sub>6</sub>; and  
physically separating the top and bottom phases to form a solution comprising  
one or both of the C<sub>3</sub>Cl<sub>3</sub>F<sub>5</sub>, and C<sub>3</sub>Cl<sub>2</sub>F<sub>6</sub>.

Claim 63 (previously presented): The process of claim 62 wherein:

the mixture comprises HF, C<sub>3</sub>Cl<sub>4</sub>F<sub>4</sub>, C<sub>3</sub>Cl<sub>3</sub>F<sub>5</sub>, and C<sub>3</sub>Cl<sub>2</sub>F<sub>6</sub>;  
the bottom liquid phase comprises C<sub>3</sub>Cl<sub>4</sub>F<sub>4</sub>, C<sub>3</sub>Cl<sub>3</sub>F<sub>5</sub>, and C<sub>3</sub>Cl<sub>2</sub>F<sub>6</sub>; and  
the solution comprises one or more of C<sub>3</sub>Cl<sub>4</sub>F<sub>4</sub>, C<sub>3</sub>Cl<sub>3</sub>F<sub>5</sub>, and C<sub>3</sub>Cl<sub>2</sub>F<sub>6</sub>.

Claim 64 (previously presented): The process of claim 62 wherein the phase  
separating comprises altering the reaction product mixture temperature to a  
temperature of from about -30°C to about -10°C.

Claim 65 (original): The process of claim 64 wherein the temperature is about -20°C.

Claim 66 (previously presented): A process for separating chlorofluorinated compounds comprising:

providing a first solution comprising both first and second C-3 chlorofluorinated compounds, the first compound having at least six fluorine atoms and the second compound having less than six fluorine atoms;

preparing a mixture comprising the first solution and water;

phase separating the mixture into at least three phases; a gas phase comprising the first compound, an upper liquid phase comprising the water, and a lower liquid phase comprising the second compound; and

removing the gas phase from the upper and lower liquid phases to form a second solution comprising the first compound.

Claim 67 (previously presented): The process of claim 66 wherein the first compound comprises  $C_3F_6Cl_2$  and the second compound comprises  $C_3F_5Cl_3$ .

Claim 68 (previously presented): The process of claim 66 wherein the phase separating comprises altering the first solution reaction temperature to a temperature of from about 25°C to about 75°C.

Claim 69 (original): The process of claim 68 wherein the temperature is about 50°C.

Claim 70 (previously presented): The process of claim 66 wherein the mixture further comprises a basic compound.

Claim 71 (original): The process of claim 70 wherein the basic compound comprises KOH.

Claims 72-88 (cancelled).